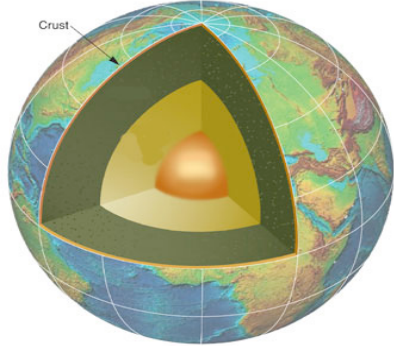
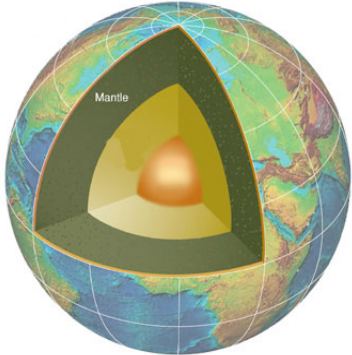
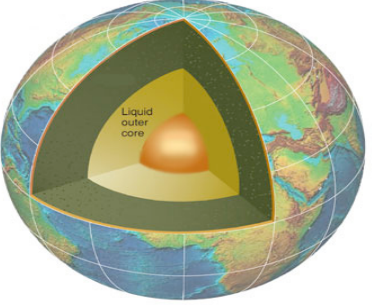
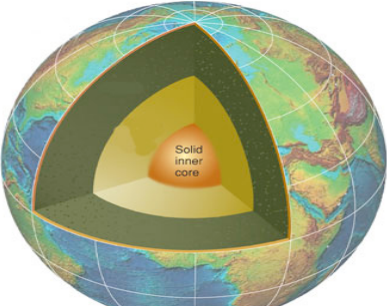


Academic Vocabulary— Science, 5-8 (adapted from *Building Academic Vocabulary* by Robert Marzano.)

<p>Provide a student-friendly description, explanation, or example of the term. LAYERS of the EARTH</p>	<p>Students <i>restate in their own words</i> in writing.</p>	<p>Students construct a <i>picture, symbol, or graphic representation</i> of the term.</p>	<p>Students <i>discuss</i> terms with one another—comparing pictures, descriptions and make additions revisions to notebook entries.</p>
<p>EARTH'S CRUST The first layer consists of about 10 miles of rock and loose materials, scientists call the crust. Underneath the continents, the crust is almost three times as thick as it is under the oceans.</p>	<p>1st layer of Earth—mostly rock and loose materials (thicker under the continents than the oceans)</p>		<p>Students discuss, analyze, compare... add, revise notebook entries as necessary.</p>
<p>EARTH'S MANTLE Beyond the Earth's crust is the mantle. The mantle extends to a depth of about 1,800 miles and is made of a thick, solid, rocky substance that represents about 85% of the total weight and mass of the Earth. The first 50 miles is made up of very hard rigid rock. The next 150 miles or so is believed to be super-heated solid rock & is very weak due to the heat energy. Below</p>	<p>2nd layer of the Earth— represents most of weight & mass of the Earth due to thick solid rock...</p>		<p>Students discuss, analyze, compare... add, revise notebook entries as necessary.</p>

<p>that for the next several hundred miles, the mantle is again believed to be made up of very solid, sturdy rock.</p>			
<p>EARTH'S OUTER CORE Earth's outer core extends to a depth of around 3,000 miles beneath the surface. It is believed that this outer core is made up of super-heated liquid molten lava. This lava is believed to be mostly iron, and nickel.</p>	<p>3rd layer of Earth made up of very hot, liquid molten lava...</p>	 <p>A cross-sectional diagram of Earth showing the outer core. The outer core is the thick, yellowish-orange layer immediately below the mantle. It is labeled 'Liquid outer core'. The inner core is a smaller, darker orange sphere at the center, labeled 'Solid inner core'.</p>	<p>Students discuss, analyze, compare... add, revise notebook entries as necessary.</p>
<p>EARTH'S INNER CORE Finally, we would reach the Earth's inner core. The inner core extends another 900 miles inward towards the center of the Earth. It is believed that this inner core is a solid ball of mostly iron, and nickel.</p>	<p>Last layer (center of the Earth)—solid ball of minerals...</p>	 <p>A cross-sectional diagram of Earth showing the inner core. The inner core is the central, dark orange sphere, labeled 'Solid inner core'. It is surrounded by the liquid outer core, which is a lighter orange color. The mantle and crust are visible as the outer layers of the Earth.</p>	<p>Students discuss, analyze, compare... add, revise notebook entries as necessary.</p>
<p>Engage students periodically in <i>games and activities</i> that help them add to their knowledge of the terms. Many examples can be found in chapter 4 of <i>Building Academic Vocabulary</i> by Robert Marzano.</p>			